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## The occurrence of the Willow Warbler *Phylloscopus trochilus* in the Indian subcontinent: notes from museum specimen records

V. J. ZACHARIAS & NATHAN H. RICE

### Introduction

The Willow Warbler *Phylloscopus trochilus* is a strongly migratory species with an extensive breeding range across northern and temperate Europe and Asia, from the British Isles to eastern Siberia. The entire population is believed to winter in Africa (Mayr & Cottrell 1986), mostly in sub-Saharan Africa, although small numbers winter in south-east Somalia, west-central Ethiopia, Egypt, Tunisia and Algeria (Clement 2006). Birds originating in north-east Siberia undertake one of the longest migrations of any Palearctic breeding passerine to reach the East African wintering grounds. It has long been suspected that it occurred in the Indian subcontinent, although until now there have been no confirmed records. Here specimens of Willow Warbler collected from Nepal and Pakistan and held in collections in the USA, and a specimen from Tajikistan housed in the Moscow State University museum, Russia, are documented.

The authenticity and identification of the very few historical claims of Willow Warbler from the Indian subcontinent are open to question. Jerdon (1840) obtained a specimen from the edge of the Western Ghats, in south India, which he believed to be this species. However, Whistler & Kinnear (1934), who extensively covered peninsular India, did not mention this record. It has also been reported from Gujarat (Ali 1954), but the specimen was found to be a misidentified Greenish Warbler *P. trochiloides* and the species was removed from the Indian bird list (Abduali & Unnithan 1986). Another was reported from Kohima, Nagaland, north-east India, in January 1952 and held in the Meinertzhagen collection (Ali & Ripley 1983), this presumably being the bird referred to by Mayr & Cottrell (1986) on passage from the Naga Hills. However, the Meinertzhagen collection is known to hold specimens that have had the collection details (location, date, etc.) deliberately and fraudulently changed, leaving the origin of many of these specimens open to question (Rasmussen & Anderton 2005). This led Grimmett *et al.* (1998) to express doubt about the Meinertzhagen specimen from Nagaland, while Rasmussen & Anderton (2005) considered it to be fraudulent and the occurrence of the species in the region to be hypothetical. More recently, a sighting of a Willow Warbler has been reported from the Periyar Tiger Reserve, Kerala, south India (Zacharias *et al.* 1997).

### Museum records

As part of a wider study into the distribution of *Phylloscopus* warblers in the Indian subcontinent based on museum voucher specimens, several previously unreported specimens of Willow Warbler were discovered. At the Academy of Natural Sciences, Philadelphia, Pennsylvania, USA, an undated specimen labelled *P. trochilus* (ANSP 52636) and as taken in 'Nepal', was examined and

the identification confirmed. Another specimen, collected from Bampur, Baluchistan, Pakistan, on 13 April 1901, was found in the American Museum of Natural History, New York, USA (AMNH 449058), where Thomas Trombone, Collection Data Manager, confirmed the identification. Two skeletons at the Smithsonian Institution (USNM 561494 and USNM 561495) were labelled as *P. trochilus*, but both were found to be *P. trochiloides*.

Slightly outside the boundaries of the Indian subcontinent, some additional interesting specimens of this species have been located, although it is suspected that these were passage rather than overwintering birds. Two specimens from Durud, Iran, held at the Academy of Natural Sciences (ANSP 174238 collected on 13 April 1941 and ANSP 174537 collected on 29 August 1941) were examined. In addition, the Field Museum of Natural History, Chicago, houses a specimen of the Willow Warbler (FMNH 106900) from Sama, Mazandaran district, Iran, collected on 17 August 1969, and the Zoological Museum of Moscow State University has a female specimen collected on 19 May 2012 by Arkhipov and Koblik, from the south slope of the Gissar range in Tajikistan (E. Koblik pers. comm.).

### Discussion

The Willow Warbler is likely to occur in the Indian subcontinent, given its close proximity to the migratory route of the species as evidenced by the specimens from Tajikistan and Iran, and Vaurie's (1959) statement that the species occurs in 'Persian Baluchistan' supports this view. The collection dates suggest that a previously undocumented passage occurs through the Indian subcontinent, and further studies may help to elucidate the migration route.

These discoveries highlight the importance of the careful examination of systematic bird collections for historically significant location records. In this case, a species previously unrecorded from the entire subcontinent has been proven to occur, albeit in small numbers, based on museum records providing vouchered records of its existence in the region. This study also highlights how valuable information may be gained from voucher specimens of even seemingly common birds in museum collections.

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## *Lophura ignita macartneyi* revisited

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### Introduction

The Crested Fireback *Lophura ignita* is a Sundaic forest species with populations in Peninsular Malaysia, Sumatra and Borneo. The usual taxonomic treatment in recent checklists (Dickinson 2003, Clements 2007), monographs (Delacour 1951, 1977, Johnsgard 1999, McGowan 1994, Madge & McGowan 2002, Hennache & Ottaviani 2005), regional avifaunas (van Marle & Voous 1988, Mann 2008) and the international Red List (BirdLife International 2001) has been to accept the existence of four subspecies: *L. i. rufa* (Raffles, 1822) in the Thai-Malay Peninsula and most of Sumatra except the far south-east; *L. i. macartneyi* (Temminck, 1813) in the far south-east of Sumatra; *L. i. ignita* (Shaw, 1798—for the date of which see Dickinson *et al.* 2006) on the Sumatran island of Bangka and in Borneo except the north; and *L. i. nobilis* (P. L. Sclater, 1863) in northern Borneo.

Of these subspecies, *nobilis* is clearly only slightly different from *ignita*, such that Mann (2008) was unable to provide an indication of where they replace each other, while *macartneyi* shows characters that suggest it to be 'intermediate between *ignita* and *rufa*' (Delacour 1951, 1977). However, such are the differences between *ignita* and *rufa* that it has been proposed they be reinstated (following, e.g., Kloss 1931, Peters 1934, Beebe 1936, Ghigi 1968) as separate species: male *rufa*, compared to ('vs') male *ignita*, has (1) dark blue belly (continuous with breast) with fine white flank-streaks vs a chestnut belly and flanks, (2) white vs buffy-rufous central tail feathers, and (3) red vs greenish-white legs (del Hoyo & Collar 2014), plus (4) red-tinged blue vs all-blue lobes on the face-wattles *fide* Delacour (1949, 1951), although not evident in internet photographs; the female differs by its (5) rich rufous vs blackish wings and tail (del Hoyo & Collar 2014).

This arrangement, however, hinges on a clearer understanding of the status of *macartneyi*. An illustration (McGowan 1994) suggests that this is itself a highly distinctive taxon, although the accompanying text reveals a far less clear-cut situation: 'race *macartneyi* very variable, with several apparently co-existing colour morphs described, based mainly on amount of rufous on plumage' (McGowan 1994). In spite of this and other passing comments in the recent literature concerning the variability of *macartneyi* (e.g. van Marle & Voous 1987, Hennache & Ottaviani 2005), its validity

as a taxon—it was omitted entirely in Peters (1934)—has not been critically examined or challenged.

The reasons for this can be traced to the comprehensive review of *macartneyi*—building on the work of Büttikofer (1895)—provided by Delacour (1949). This study made some crucial clarifications and advances in the taxonomy of *Lophura ignita* and *L. rufa*, covering the history of the 'many names' (*macartneyi*, *sumatrana*, *delacouri* and *albipennis*) for Sumatran birds associated with these taxa and, through careful analysis of descriptions, pinning those names to particular museum specimens. In documenting eight male study skins at the Rijksmuseum van Natuurlijke Historie (now Naturalis) at Leiden, Netherlands, Delacour (1949) developed the view that the considerations of previous authors (Ghigi 1926, Kloss 1931, Beebe 1936) were 'based on the conception that *ignita*... and *rufa* are two different species' and that 'a more modern idea of systematics' is rather that 'the Crested Firebacks constitute but one species with four subspecies (*ignita*, *nobilis*, *macartneyi*, *rufa*), *macartneyi* serving as a link and a transition'. He therefore preferred 'to consider *macartneyi* as a subspecies inhabiting the south-eastern part of [Sumatra], that is variable in colour and still in the course of evolution'.

In further pursuit of this interpretation, two years later Delacour (1951) accounted for the various names and appearances of birds in south-east Sumatra by calling them 'phases' (the term 'morph' was only coined four years later: Huxley 1955). The 'phase to which the type [specimen 1 in Table 1] belongs' (i.e. the form *macartneyi*) has buff central rectrices and is either (a) like *ignita* (dark blue breast, rufous belly) but heavier in shape and with generally paler rufous colours or (b) with breast and belly dark blue and flanks with rufous patches. The phase *delacouri*' has plain rufous sides but the central rectrices are mostly white. The phase *sumatrana* has the belly dark blue, rufous or mixed, flank feathers black-based and rufous-tipped, the rufous varying in size and tone and with or without a black border, and central rectrices white, sometimes washed buff usually near the base and with variable amounts of black. The phase *albipennis* replaces the rufous of the flank markings of blue-bellied birds with white. Delacour (1951) judged that the first three phases co-occur, while the fourth is found close to the range of and is 'intermediate' with *rufa*.